

ABSTRACT

A process for controlling the volume of dry air, dried to a predetermined degree of dryness, from a sweep manifold of an air dryer system, flowing over a plurality of gas/liquid fluid separating membranes, comprising: diverting a predetermined volume of dried air to the manifold; sensing one of the flow volume and humidity values of the remainder of the dried air or the pressure differential within the system; and utilizing one of the differential pressure to control the predetermined volume of dried air and utilizing a controller for achieving the predetermined degree of dryness by controlling at least one solenoid valve which, in turn, controls the flow volume of the predetermined volume of dried air diverted to the manifold.